

WHAT IS CLAIMED IS:

1. An electroluminescent display device, comprising:
a plurality of pixels;
5 an electroluminescent element provided in each of the pixels;
a pixel selecting transistor provided in each of the pixels and selecting the corresponding
pixel in response to a gate signal; and
a driving transistor provided in each of the pixels and supplying an electric current to the
corresponding electroluminescent element in response to a display signal supplied through the
10 corresponding pixel selecting transistor,
wherein the pixel selecting transistor comprises an active layer made of polysilicon, and
the driving transistor comprises an active layer made of amorphous silicon.
2. An electroluminescent display device, comprising:
15 a plurality of pixels;
an electroluminescent element provided in each of the pixels;
a pixel selecting thin film transistor provided in each of the pixels and selecting the
corresponding pixel in response to a gate signal; and
a driving thin film transistor provided in each of the pixels and supplying an electric
20 current to the corresponding electroluminescent element in response to a display signal supplied
through the corresponding pixel selecting thin film transistor,
wherein a carrier mobility of the driving thin film transistor is lower than a carrier
mobility of the pixel selecting thin film transistor.
- 25 3. The electroluminescent display device of claim 2, wherein the pixel selecting thin
film transistor comprises a first polysilicon active layer and the driving thin film transistor
comprises a second polysilicon active layer.
4. The electroluminescent display device of claim 3, wherein a gain size of the first

polysilicon active layer is larger than a grain size of the second polysilicon active layer.

5 5. A manufacturing method of an electroluminescent display device comprising a substrate, a pixel selecting transistor formed on the substrate and a driving transistor formed on the substrate and driving an electroluminescent element, the method comprising:
 forming an amorphous silicon layer on a whole surface of the substrate;
 irradiating part of the amorphous silicon layer by a laser to grow crystallites; and
 patterning the irradiated part of the amorphous silicon layer to form an active layer of the pixel selecting transistor and patterning the amorphous silicon layer that is not irradiated by the
10 laser to form an active layer of the driving transistor.

 6. The manufacturing method of the electroluminescent display device of claim 5, wherein the electroluminescent display device further comprises at least one additional pixel selecting transistor, the method further comprises providing a mask having openings
15 corresponding to the pixel selecting transistors, and the irradiating by the laser comprises irradiating the amorphous silicon layer through the openings at one time.

 7. The manufacturing method of the electroluminescent display device of claim 5, wherein the electroluminescent display device further comprises a plurality of pixel selecting
20 transistors, the method further comprises providing a mask having openings corresponding to the pixel selecting transistors, and the irradiating by the laser comprises irradiating the amorphous silicon layer through a set of the openings at one time.

 8. The manufacturing method of the electroluminescent display device of claim 7,
25 wherein the irradiating by the laser is repeated by irradiation through another set of the openings.

 9. A manufacturing method of an electroluminescent display device comprising a substrate, a plurality of first thin film transistors for selecting a corresponding pixel and a plurality of second thin film transistors for driving a corresponding electroluminescent element,

the method comprising:

forming an amorphous silicon layer on a whole surface of the substrate;

providing a mask having openings corresponding to the first thin film transistors;

irradiating portions of the amorphous silicon layer through a set of the openings by a laser

5 to grow crystallites; and

repeating the irradiating of the amorphous silicon layer through another set of the openings.